PROPOSED WASTEWATER TREATMENT PROJECTS

KENTUCKY RIVER ADD PLANNING AREA

- Proposed projects would connect about 5,700 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$31,700,000
- Estimated funding needs for public sewer 2006-2020--\$70,000,000

Estimated costs for public sewer expansions and associated system upgrades are:

Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
BREATHITT							-
Jackson .	290	2,500					2,500
KNOTT							-
Hindman .	193	2,000					2,000
LEE							-
Beattyville							none
LESLIE							-
Hyden		1,100	2,500				3,600
LETCHER							-
Whitesburg	48	1,145	2,681				3,826
Fleming-Neon	719	4,300	820				5,120
Jenkins	35	300	ı				300
Letcher Co. Water/Sewer	72	2,500	ı			2,000	4,500
County Total	874	8,245	3,501			2,000	13,746
OWSLEY							-
Booneville .	140	1700					1,700
PERRY							-
Hazard .	55	2088					2,088
Sanitation District #1 .	600	3000					3,000
County Total	655	5,088					5,088
WOLFE							-
Campton	200	1,400	-	1,700			3,100
KRADD TOTAL	2,352	22,033	6,001	1,700		2,000	31,734

Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
BREATHITT							-
Jackson	No long term projects						none
KNOTT							-
Hindman	Prison	10,000					10,000
LEE							-
Beattyville	12	500					500
LESLIE							-
Hyden	200	2,000					2,000
LETCHER							-
Fleming-Neon	300	2,975					2,975
Jenkins	12	300					300
Letcher Co. Water/Sewer	1,500	20,000			5,000		25,000
County Total	1,812	23,275			5,000		28,275
OWSLEY							-
Booneville	160	8,000		2,000			10,000
PERRY							-
Vicco	515	3,260	3,000	3,000			9,260
Sanitation District #1	600	4,000			6,000		10,000
County Total	1,115	7,260	3,000	3,000	6,000		19,260
WOLFE							-
Campton - No long term projects							none
KRADD TOTAL	3,299	51,035	3,000	5,000	11,000		70,035

BREATHITT COUNTY

- Proposed projects would connect about 300 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$2,500,000
- Estimated funding needs for public sewer 2006-2020--\$0

Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
BREATHITT							-
Jackson SX21025001	290	2,500					2,500

Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
BREATHITT							-
Jackson							none

PROJECT LISTING

Project#	<u>Priority</u>	Project Owner	Cost Estimates
Customers			
SX21025001	Immediate	City of Jackson	\$2,500,000
290		-	

Description: Various line extensions including Pan Bowl area, Armory Drive, Kings Branch, Licks Branch, Hwy 15 North, Shacks Branch, Hwy 30 West and Hwy 52 at Millers Branch and Colts Fork.

SX21025002 Immediate City of Jackson \$700,000

60

Description: Received some funding from 531 Corps of Engineers grant. Trying to determine accuracy of cost estimate and locate matching funds. Would cover residents of the Hardshell/Caney area.

KNOTT COUNTY

- Proposed projects would connect about 200 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$2,000,000
- Estimated funding needs for public sewer 2006-2020--\$10,000,000

Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
KNOTT							1
Hindman SX21119001	193	2,000					2,000

Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
KNOTT							-
Hindman SX21119002	Prison	10,000					10,000

PROJECT LISTING

HINDMAN WASTEWATER PLANT

Project# Priority Project Owner Cost Estimate Customers

SX21119001 Immediate City of Hindman \$2,000,000 193

Description: About 6 miles of Line extensions on the Left Fork of Troublesome

and the Right Fork of Traces Branch. Includes pump and existing line repair. SX21119002 Long Term Caney Creek \$10,000,000

Description: Regional Sewer plant to serve Industrial site in Knott County

along with residential customers in Knott and Perry Counties.

LEE COUNTY

- Estimated funding needs for public sewer 2000-2005--\$0
- Estimated funding needs for public sewer 2006-2020--\$500,000

Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
LEE							none
Beattyville SX21129001	Immediate projects funded						-

Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
LEE							-
Beattyville SX21129002	12	500					500

PROJECT LISTING

Project#	Priority	Project Owner	Cost Estimate	Customers
-	Long Range	City of Beattyville	\$500,000	
12	\mathcal{E}	, ,	, ,	

Description: Last remaining section expected to be served. Located at Southfork area around the junction of Hwys 1411, 52, and 11.

LESLIE COUNTY

- Proposed projects would connect about 300 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$3,600,000
- Estimated funding needs for public sewer 2006-2020--\$2,000,000

Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
LESLIE							-
Hyden SX21131001	HS+104	1,100	2,500				3,600

Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
LESLIE							-
Hyden SX21131002	200	2,000					2,000

PROJECT LISTING

Project# Priority Project Owner Cost Estimate Customers
SX21131001 Immediate City of Hyden \$1,100,000 extensions 104
\$2,500,000 upgrades

Description: Extension to High School which would replace a package plant, extension along US 421 South, extension at Breckinridge area, and the Hyden Spur area. 104 Customers includes 12 commercial customers.

SX21131002 Long Range City of Hyden 200

Description: Hurts Creek area and Rockhouse extension at Hyden Spur. Also will provide service to proposed industrial park.

LETCHER COUNTY

- Proposed projects would connect about 2,700 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$13,700,000
- Estimated funding needs for public sewer 2006-2020--\$28,300,000

Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
LETCHER						, ,	-
Whitesburg							-
SX21133005	48	1,145					1,145
SX21133007			2,681				2,681
Total	48	1,145	2,681				3,826
Fleming-Neon							
SX21133001	500	3,100					3,100
SX21133002	219	1,200	820				2,020
Total	719	4,300	820				5,120
Jenkins							-
SX21133008	35	300					300
Letcher Co. Water/Sewer							-
SX21133006	72	2,500					2,500
Rural Community Systems						2,000	2,000
Total	72	2,500				2,000	4,500
County Total	874	8,245	3,501			2,000	13,746

Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
LETCHER							-
Fleming-Neon							-
SX21133003	243	2,295					2,295
SX21133004	57	680					680
Total	300	2,975					2,975
Jenkins SX21133009	12	300					300
Letcher Co. Water/Sewer							-
SX2113310	1500	20,000			5,000		25,000
County Total	1,812	23,275			5,000		28,275

The two big problems facing the county are the number of straight pipes and failing septic systems. A lot of homes from the old coal camps are built on lots to small for traditional septic systems, and in many parts of the county the soil is unsuitable for proper percolation of septic fields.

Letcher County is taking action on these problems. Local municipalities are working with the County Water and Sewer District to extend services to areas that can be served by traditional means, while the Water and Sewer District is pursuing alternative methods of treatment such as individual peat and cluster systems for areas well outside current municipal boundaries. The District has located several areas that appear to be

suitable for cluster systems, but no specific site for expansions are planned because they need to coincide with future water expansions. A long range solution that has been discussed is a large plant to be located in the Cowan area. Working in conjunction with the Neon plant, the entire Boone Fork and the headwaters of the North Fork of the Kentucky River would be served. Also, The Letcher County Fiscal Court recently passed a mandatory sewer ordinance.

PROJECT LISTING

WHITESBURG WASTEWATER TREATMENT PLANT

Project# Priority Project Owner Cost Estimate Customers
SX21133005 Immediate City of Whitesburg \$1,145,000 48
Description: Collins/Day Hollow area and Long Branch area expansions.

SX21133007 Immediate City of Whitesburg \$2,681,000 Description: Upgrades to collection system and plant.

FLEMING-NEON SEWER PLANT

SX21133001 Immediate Fleming-Neon \$3,100,000 500

Description: Extensions of nearly 8 miles in the Haymond/Kona area.

SX21133002 Immediate Fleming-Neon \$1,200,000 219
Description: Yonts Fork and Hemphill Extensions.

Immediate upgrades \$820,000

SX21133003 Long Range Fleming-Neon \$2,295,000 243

Description: Remainder of Yonts Fork and various spots with in the city

SX21133004 Long Range Fleming-Neon \$680,000 57
Description: Remainder of Potter Fork and lower Boone Fork
Long Range Upgrades \$204,000

JENKINS SEWER PLANT

SX21133008 Immediate City of Jenkins

35

limits.

Description: Various extensions throughout the city including Rocky Hollow, Tin Can Hollow and East Jenkins Hill.

SX21133009 Long Range City of Jenkins 12

Description: Extensions at Joes Branch.

LETCHER WATER AND SEWER

Project#PriorityProject OwnerCost EstimateCustomersSX21133006ImmediateLetcher Water72Description:Using Whitesburg's plant, extend service to the Whitcoarea.

SX21133010 Long Range Letcher Water 1,500

Description: Includes Virtually all households surrounding Whitesburg and a treatment plant in the Cowan area.

OWSLEY COUNTY

- Proposed projects would connect about 300 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$1,700,000
- Estimated funding needs for public sewer 2006-2020--\$10,000,000

Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
OWSLEY							-
Booneville SX21189001	140	1,700					1,700

Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
OWSLEY							-
Booneville SX21189002	160	8,000		2,000			10,000

PROJECT LISTING

<u>Project# Priority Project Owner Cost Estimate Customers</u>
SX21189001 Immediate City of Booneville 140

Description: Extensions northeast and northwest of Booneville on Hwy 11 and Hwy 30.

Project# Priority Project Owner Cost Estimate SX21189002 Long Range City of Booneville

Description: Extensions in Southern and adjacent to Booneville, Hw 30 east to Lerose, Hw 30 West to Pebworth, southeast of Booneville and to Chestnut Gap Area southeast of Booneville.

PERRY COUNTY

- Proposed projects would connect about 1,800 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$5,090,000
- Estimated funding needs for public sewer 2006-2020--\$19,260,000

Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
PERRY							
Hazard SX2119002	55	2,088					2,088
Sanitation District #1 SX21193003	600	3,000					3,000
County Total	655	5,088					5,088

Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
PERRY							-
Vicco SX21193001	515	3,260	3,000	3,000			9,260
Sanitation District #1 SX21193004	600	4,000			6,000		10,000
Total	1,115	7,260	3,000	3,000	6,000		19,260

PROJECT LISTING

VICCO SEWER PLANT

Project# Priority Project Owner Cost Estimate Customers
SX21193001 Long Range City of Vicco \$5,997,000 extensions 515
\$2,454,000 new plant

\$682,000 Collection upgrades \$130,000 pump station upgrades

Description: Various extensions north and south along 15, Montgomery Creek Sassfras, Stacey Branch and Georgias Branch.

HAZARD WASTEWATER TREATMENT PLANT

Project# Priority Project Owner Cost Estimate Customers
SX21193002 Immediate City of Hazard \$2,088,000 55
Description: Extension on Highway 15 North that will also serve the
Coal Fields Industrial Park and replace 5 package plants along the way.

SANITATION DISTRICT ONE

<u>Project# Priority Project Owner Cost Estimate</u> <u>Customers</u> SX21193003 Immediate Sanitation District \$3,000,000

600

Description: Extension in Hardburley area that will remove a lot of straight pipes.

SX21193004 Long Range Sanitation District \$4,000,000

600

\$6,000,000 new plant

Description: Extensions at Lotts Creek, Upper Second Creek and a new

plant.

WOLFE COUNTY

- Proposed projects would connect about 200 new households to public sewer during 2000-2020
- Estimated funding needs for public sewer 2000-2005--\$3,100,000
- Estimated funding needs for public sewer 2006-2020--\$0

Proposed Projects 2000-2005

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
WOLFE							-
Campton SX21237001	200	1,400		1,700			3,100

Proposed Projects 2006-2020

System	New Customers Served	Cost (\$1000)	Line Upgrade (\$1000)	Treatment Expansion (\$1000)	New Treatment (\$1000)	Lift Stations, and other (\$1000)	Total Costs (\$1000)
WOLFE							-
Campton - No long term projects							none

PROJECT LISTING

Project# Priority Project Owner Cost Estimate Customers

SX21237001 Immediate City of Campton \$1,400,000 extensions 200

\$1,700,000 plant upgrade

Description: 1.7 million grant from PRIDE is in place for system upgrades, awaiting funding of 1.4 million for extensions to cover homes in West Campton and Washington Street.